

VOL. XIX.

ST. LOUIS, MO., JUNE 15, 1867.

NUMBER 12.

PUBLISHED BY NORMAN J. COLMAN,
EDITOR AND PROPRIETOR, 97 Chestnut Street,
St. Louis, Mo.

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COLMAN'S RURAL WORLD

Is devoted to the promotion of the
AGRICULTURAL, HORTICULTURAL AND STOCK
INTERESTS OF THE VALLEY OF THE MISSISSIPPI.
It is issued on the 1st and 15th of every month, in
quarto form, each number containing 16 pages, mak-
ing a volume of 384 pages yearly. Terms—\$2.00 per
annum in advance; Four copies, \$6; Ten copies \$15,
and a Premium of Six Concord Grape Vines to any
one sending the names of Four subscribers and \$6;
and Fifteen Concord Grape Vines to any one sending
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For quarter column, - - - - - 5.00
Local Notices, per line, - - - - - 0.50

CULTIVATING HOED CROPS.

We are frequently asked for the best imple-
ments for cultivating hoed crops. The answer
involves several other inquiries as to the con-
dition of the soil and the crop to be worked.

If the soil has not been nicely prepared, and
is left in a rough, lumpy condition, the light,
one-horse plow should first be used to give the
soil better preparation. It is then advisable to
turn furrows from the rows to the center, let-
ting the plow go pretty deep—the better to
prepare the ground for the roots of the plants.
Of course this is while the plants are young,
and before the roots have extended far. After
a week or two the centre can be broken and
the furrows thrown to the row with either the
plow or the cultivator—thus furnishing a nice
bed of soil for the roots of the plants. After
this, deep working is not recommended, as it
will interfere with and injure the roots and
crop. A horse hoe is now the best implement
to run between the rows, cutting the roots of

weeds about an inch under the surface of the
ground, and leaving the weeds strewn on the
ground to perish. The soil is left loose for
about an inch on the surface, which is a good
mulch. And this horse-hoe should run between
the rows at least once a week if possible till the
plants get so large they can no longer be culti-
vated.

If the soil has been deeply worked and well
prepared—the cultivator and the horse hoe only
need be used, or the latter only. It is import-
ant to begin working hoed crops early—before
the weeds get a strong hold of the soil. If they
get a firm foothold, they are much worse to
exterminate. It is much more profitable to
raise good crops of corn, potatoes, fruit, &c.,
than of weeds—and the only way this can be
done is, to make unceasing war upon the weeds
with plow or cultivator or horse-hoes and hand-
hoes. This is the time to give them no quar-
ter.

Pruning Osage Orange Hedges.

Now is the time to commence pruning the
Osage Orange hedge. The wood is soft and
can easily be cut with a corn knife. The hedge
can readily be put into any shape. The chief
object in pruning it, is to make it close, com-
pact and dense at the base, so as to prevent
stock from getting through it. This is accom-
plished by cutting off the tops and throwing
the growth into the laterals. In the early
stages of the hedge, the laterals, too, should
be cut back, for the purpose of securing more
laterals and a denser, thicker, growth. Hedges
need frequent attention and pruning in sum-
mer. The strong shoots need lopping off at
any time. A nice, even growth, should be en-
couraged. Our timber is so scant, and is so
fast disappearing, that we are, and shall be,
compelled to resort to hedging. The Osage
Orange is the best tried hedge plant. With
proper care and attention, we know it will make
an excellent hedge—better than any rail fence.
But securing and planting the plants is the
smallest part of the work. They need nice
cultivation and careful pruning for many years,
and when the hedge is once established it is
good for a lifetime. Therefore don't neglect
the hedge. Try and make it perfect. Encour-

age the weak plants and repress the strong
ones. Put it in comely shape. Work at it, at
any time, that it needs attention. During all
the summer months it can be pruned, trained,
and perfected.

PURE COUNTRY MILK.

ED. RURAL WORLD: As a citizen of St. Louis,
I am glad to see the City Council is taking
some action about city dairies and swill-fed
cows. Action of some kind is needed—positive
action. Milk made from the slops and swills
gathered around the city, cannot make healthy
milk. Neither can milk made from brewers'
and distillers' refuse be wholesome. Is it a
wonder that there is so much mortality among
children, considering the poisonous liquor they
get under the name of milk? And should not
every one in the city keeping a dairy fed on
such slops, be heavily fined and positively pro-
hibited from keeping such a nuisance?

But it was not for this purpose that I drop
you a few lines. Are the dairies in the coun-
try that send milk to the city, much better?—
Is it not notorious that they haul, all winter,
brewers' and distillers' slops to their cows—
which they convert into milk. Is such milk
the right kind? Is it as good as if made of
good hay and corn meal or bran? Can it be as
healthful or nutritious?

But, again, did you ever visit one of these
dairies supplying milk to us St. Louisans? I
have visited several in the vicinity of St. Louis
and—horror of horrors! What a vile com-
pound does one get when he buys this pure
country milk! The cows are kept in dirty
stalls in winter and are not furnished any bed-
ding—that is, straw to lie upon (that would be
expensive). They are compelled to lie down
in their own filth—their bags, hips and sides
being one mass of filth. Men are used as milk-
ers—and what dirty hands and persons they
have! The dirt and filth from their hands
wash down into the milk. The buckets set un-
der the cows, and every movement displaces
some of the filth on the cow which drops into
the bucket—and there is a rich mess for you!
There is pure country milk!

But go to the milk establishment! Every-

thing is dirty there. The buckets and pans are filthy, and don't get scalded out once a month. No wonder the milk sours so soon after it is purchased. But there is another reason why it becomes sour so soon. It is kept a day or two and the cream taken from it. Then it is mixed with a little morning milk and a good deal of water, and sold as pure country morning's milk! What a slander upon country milk is this. No wonder city folks drink milk and butter-milk till they burst nearly, when they get into the country among their friends. They then find pure country milk—such as I hope to be able one of these days to enjoy, when I am able to own a neat country home.

In conclusion, I would say that no more important measure for the health of our city could be discussed in our Legislature than the enactment of a stringent law and the appointment of an Inspector of Milk and Dairies. R.

ALSIKE CLOVER.

Mr. Chauncey Miller, of the Shaker Family, near Albany, furnishes the following statement of his experience with this plant:

We find the Alsike clover a very superior grass in the following points:

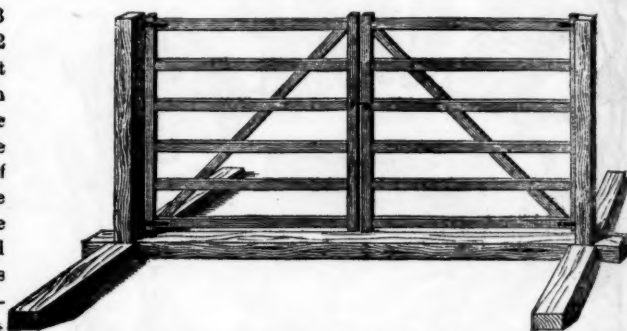
1. For its value as a hay crop, on a great variety of soils, being of a growth, in height, varying according to quality of soil, from ten inches to two and a half feet, and yielding from one and a half to three tons per acre, according to soil; thus comparing with our best red clover, though, of course, not so high as the great western pea vine clover, but, with us, one-third higher than the small, southern red clover.
2. For fineness of stalk, or haulm.
3. For its multitude of sweet flowers, blooming, perhaps, three or four times as much as red clover, making, when in bloom, literally "a sea of flowers."
4. Its adaptation to heavy soils, clays or heavy clay loams, as well as sandy soils, not being so liable to heave out by frosts in winter and spring, as red clover, on account of the root being more fibrous, partaking somewhat of the character of the white clover, (*trifolium repens*), being the product of a cross between the red and white clovers originated in Germany.
5. To all farmers who keep bees largely, the crop would be of great value, as bees can work upon the flowers equally as well as upon white clover, as they are about the same size and precisely the same habit, as the latter, but are much more abundant in honey; bees appear as fond of the flowers as of mignonette, and, in the season of flowering, which lasts about six weeks, are continually upon it, from dewy morn until dusky eve.
6. To those farmers raising clover seed for market, the Alsike clover, in our opinion, would be of great value, as it seeds enormously, and the seed threshes easily, by flail or machine, leaving a beautiful quality of hay, the stalks retaining their greenness, when most of the seed is quite ripe.
7. It holds many weeks in bloom, thus giving the farmer lee-way of time and weather, in regard to securing the crop.

PRESERVATION OF EGGS.—A Parisian paper recommends the following: Dissolve 4 ounces of beeswax in 8 ounces of warm olive oil, in this put the tip of the finger and anoint the egg all around. The oil will be immediately absorbed by the shell, and the pores filled up with the wax. If kept in a cool place, the eggs after two years will be as good as if fresh laid.

Take a piece of oak, 3 inches by 6 inches, and 2 feet longer than you want your gate. One foot from each end frame in a piece 6 feet long of the same sized timber, with a half lap mortice; the mortice being made at the centre of the shorter pieces, and they being at right angles with the longer piece.—

For posts take two pieces of the same sized timber, 6 inches longer than the height of your gate. Make a mortice 3 inches square in the centre of the intersection of your sills; and tenons of same size and 6 inches long on the ends of the posts. Make a mortice 1 inch wide and 2 inches long through the centre of these tenons, through which drive a drawing wedge of hard wood, after the post has been put in its place in the sills. This

PORTABLE GATE.



keeps everything in its place. The gate should be made of light wood—pine, or something of that kind—and should be made in two parts; one swung to each post, on hook and strap hinges. The upper edges of the long side should be beveled down where the wheels cross it. One man can take down or set up this gate in five minutes. It can be fastened either with hook and staple, or by pins in the sill.

GOOD BUTTER.

If you fail to sell your butter at the highest market price, you may be certain that it is not of the best quality and that the fault is all in the making. There are a few simple rules, which, if followed strictly, will insure good butter and top prices—the first, and most important of which, is, perfect cleanliness in every stage of the process of making. Without this, all other conditions will be fulfilled in vain.

1. Your milk pails, pans, cream pot and churn, must be washed perfectly clean every time they are emptied, and then thoroughly rinsed in boiling hot water, wiped with a clean towel and dried in the sun and fresh air.

2. Before milking, brush the cow's bag before you set the pail under, and get off the loose, fine hairs, which will otherwise fall into the milk; and if the teats or bag are dirty, wash them clean with cold water.

3. Set your milk in a cool, airy place, where it will be secure from smoke, soot, ashes, dust and flies, and take off the cream before it turns to clabber. To get all the cream before the milk turns, it is an excellent plan to set the pails in to kettles over the fire with a little water in them, and heat the milk nearly to the boiling point, and stir it before straining. By this means you will get all the cream in twelve hours, perfectly sweet and free from lumps of clabber.

4. Every time you add fresh cream to the churning, stir the whole well together, and keep the cream excluded from all manner of dirt and foul or hot air.

5. When churned, work the butter-milk thoroughly out of it. To do this, some work it in cold water, believing that it requires less manipulation to accomplish it, and results in less injury to the grain of the butter, which is injured by excessive working; but if water is used, care must be taken to work that out, or it will be as bad as the butter milk in its effect upon the butter. Pure rock salt, if ground

fine, is as much better for butter as it is for pork in the coarse state. Salt freely, but not excessively. Butter that is too fresh is insipid, however perfect it may be in other respects.

6. Pack closely in perfectly tight, clean crocks or tubs, scalding them thoroughly just before they are brought into use, and keep the butter covered with a strong brine of rock salt.

These rules faithfully followed will cause your butter to be sought after at the highest prices. But if, on the contrary, you wash your milk things in tepid, greasy dish water, wipe them with a greasy dish cloth, and set them for use without scalding—if you let all the hairs and dirt go in that will in milking, strain through something that has holes as large as your finger, set your milk where your bacon should be, and where it will catch all manner of dirt, and let it stand till it will stand alone before taking off the cream—you need not wonder that nobody wants to buy your butter.—*Wis. Farmer.*

Bees the Past Year.

The past season of 1866 was a severe one for bees—at least in many parts of the country, if not in most. The season was too cold and too wet. The old black bees were less successful than the Italians. These latter, when there were moments favorable for gathering honey, would work prodigiously, filling, in many cases, a fair hive in a week, and sending out swarm after swarm, which their prolific qualities favored.

Respectable authorities state that, in twenty years, there has not been such an inauspicious season for bees as last year. Many swarms have died, not only during the past winter, but even in midsummer, in consequence of the unfavorableness of the season, there not having been honey enough gathered to sustain the colony. The only success, indeed, was in the flowering time in May. Previous to that there was nothing; and after that the same, till the season was well advanced. Then there was some smart working at times. But August and

September again were bad, cold and wet. This was fatal to the winter stock of honey; and hence the destruction of bees. This exceptional luck should discourage no one. It may not occur again in half a lifetime. Let there be more attention given to what we still have, and all will be well.

[Selected for Colman's Rural World.]

Reasons for Attaching Agricultural Colleges to Existing Institutions.

"1st. The great cost of buildings for lecture and recitation rooms, halls, libraries, laboratories, and many other accommodations, may, for the most part, be saved, since, in our College, there is accommodation for many more students than now attend.

"2d. Existing Institutions, too, are already supplied with museums of natural history, geology, comparative anatomy, and the like, and with libraries for general reading, and scientific works—all of which may be available to a larger number of students.

"It requires a long period of time, as well as a large amount of money to form such collections—and, without them, an agricultural college could not be expected to maintain a position of dignity or usefulness.

"3d. Existing Institutions have organized corps of professors, many of them (as of chemistry, physics, botany, physiology, mathematics, ethics,) the same that would be necessary in the agricultural college, and those, with slight addition to their labors or numbers, could give instruction to the students in agriculture and mathematics.

"4th. The great leading minds of the country are already engaged and attached to existing institutions, and it will be found impossible to organize new colleges with competent professors.

"5th. The union of the highest education in the sciences, and in their application, is impracticable; the true education consists in the apprehension of principle and in general discipline, rather than in practical arts, which may be readily learned afterwards.

"6th. That knowledge is advanced by the devotion of thoroughly trained minds to special branches of science, whereby discoveries are made and actual additions to the sum of human knowledge are published to the world. The Smithsonian Institution at Washington, and the Museum of Comparative Zoology at Cambridge, Mass., are illustrations of this special mode of study, and all the higher Universities and Colleges, incidentally, at least to some extent, adopt the same method."

ED. RURAL WORLD: Please tell me the proportions of lime, salt and sand, proper for making the fireproof wash for shingles, mentioned in your issue of May 15. SUBSCRIBER.

REPLY.—The recipe we cut out of an exchange paper, and we judge the proper proportions would be 2 parts of lime to 1 each of salt and sand, with hot water sufficient to make it of the proper consistency; 1 part of wood ashes would still further improve it.

WESTERN FARMERS.

Geo. W. Bungay, an editor and author of much celebrity, in an article in the *Herald of Health*, thus speaks of Western farmers. He first quotes Theodore Tilton, who says: "Western men, farmers, as well as others, 'are the bluffest, frankest, heartiest men on earth. They carry their hearts in their hands, their souls in their eyes. You jostle against them in the street, and by that contact have made their intimate acquaintance. If they like you, they will let you know it; if they don't like you, they do not conceal it by any of the little frauds of unmanly politeness.'" To which Mr. Bungay adds: "True, every word of it. When a Western man shakes you by the hand you feel his heart beating to the finger-tips; not a cold, dead finger or two touching your palm and chilling the warm blood of love and friendship into ice. It is a fact, that many of the best people of the West are from New York and New England; but they do not pride themselves on that account. They are conscious of the fact that the man of the West is more of a representative man of America than is the man of the East. If the reader imagines there is a great lack of social refinement and elegance at the West, he is mistaken."

HOW TO GROW CLOVER SEED.

F. P. M. wishes to be informed when it is the right time to cut clover to secure a good crop of seed, and the best method of saving it. I will tell my way.

I cut my first crop as soon as it is in full bloom, as it makes better hay than if left longer, and also gives the seed crop a chance to commence growing sooner; for, mind you, "a good crop of seed" often depends upon how early the first crop is taken off.

Let the crop stand till the heads are all, or nearly all, brown, and the stalks have commenced to dry.

I am aware that some of the seed may be beaten out by storms and lost, if left to get dead ripe, but the loss is but small in comparison to the amount of seed that will go through the machine unthreshed, if cut before it is nearly all ripe.

When ripe, I take my "Kirby" mower, put on the platform, and with a boy to drive, and knives sharp, we start. As the machine cuts it, I rake it back on the platform till there is a good fork full, and then rake it off the same as a bundle of wheat, and so on round the field. The next time around, rake off the bunches at the same places as the first time, and so on till the field is done.

If it is likely to rain, draw it immediately, as the seed will take no hurt if the straw is ripe when cut, and there might be some loss if the seed gets wet, as the bunches might have to be turned to dry them, which would shell off some of the seed.

In drawing, drive close to the rows of bunches, pitching on a bunch at a time.

By following this plan, I am able to save my clover seed with but very little loss; but if mown, and then raked and bunched, or the heads picked with a clover "picker," there is a great waste; for, in the former case, a great deal of seed is beaten off, and, in the latter, a great many heads are left unpicked. But, in cutting with a machine, we can graduate the height of the cut according to the height of the clover, thereby saving nearly every head.

The time to thresh is in cold frosty weather, in the winter, as the straw is not so tough, and it is a much easier matter for the machine to

save all the seed than it would if threshed in damp weather.

The clover machines in this vicinity thresh the straw, as a wheat machine does wheat straw, and deliver the clean seed in a bag. Sometimes it has to be run through a fanning mill to fit it for market.

The remarks at the head of this article refer to the small kinds of clover. If the mammoth clover is raised, of course no crop can be taken off for hay, but the crop can be pastured off till midsummer, and then allowed to grow up to seed. In all other respects, it is served the same as the smaller clover.

It must be borne in mind that taking a crop of clover seed draws heavily from the soil, and we must act accordingly by sowing plaster in the spring, and, if possible, top-dressing the land the fall previous with good fine manure "spread evenly."

Following these directions, F. P. M. ought to raise "a good crop of seed."—*Cor. of Country Gentleman.*

ALDERNEY CATTLE.

The Editor of the *Practical Farmer* recently visited the farm of Charles H. Shinn, situated 2½ miles from Haddonfield, N.J., and 8 miles from Philadelphia, and thus describes his herd of Alderneys:

"The great attraction, however, which induced our visit, was the large herd of Alderneys, now admitted to be the breed for the butter dairy. Here we found the celebrated bull Gen. Putnam, and a large number of some of the finest pure-bred Alderneys of the country, gathered by the enterprise and liberality of our friend Shinn from distant sections of the Union, or wherever the finest animals could be selected, without regard to price. We found them of all ages, from the youngest calves a week or two old (one of which, at this age, he had sold just previous to our visit for \$125,) up to the ten or twelve year old breeders, whose stock by Gen. Putnam is scattered over many of the States. Col. Alexander, of Kentucky, purchased from this herd last fall over \$3000 worth; and the demand for heifer calves is continually ahead of the supply. The heifers and cows are valued at from \$250 to \$500 each; and the whole herd, we should suppose, of all ages, would exceed sixty head. The peculiar, deer-like character of the breed, its fine bone, tapering limbs; soft, mellow, velvety, and yellow skin; the black nose; prominent, dark, gazelle-looking eye, surrounded by its characteristic yellow circle; the small, tapering, nearly drooping horns; the beautifully shaped udder, free from fleshiness; the light fawn or yellow and white color; small size, and gentle disposition:—are unmistakable the world over as indicating the pure Alderney. When grazing together on the pasture, they greatly resemble a herd of deer, and are quite as attractive in appearance;—while at the same time they possess a value for the butter dairy altogether unequalled by any other breed."

If, as Mr. Lawes says, a ton of clover straw is worth \$9.64, while a ton of wheat straw is worth but \$2.68, we can well account for the benefit of clover, not only as food for stock, but to plow under.

PASTURES AND GRASSES.

The first thing that the grazier needs is good pasture. Without plenty of grass, of good quality, nothing can be done profitably. Pastures should be well fenced and of a proper size. A small number of cattle grow and fatten better than a large number. Fifty bullocks in one lot would do better than a larger number, and are probably as many as should be pastured together, if it is desired to make them fat, and even a less number will be found to do better. A lot of ten steers will fatten faster and weigh heavier than a lot of fifty, in a given time. The size of a pasture necessary for a given number of cattle will depend much upon the quality of the soil, and the amount of green timber that may be upon it. Pastures here (Putnam county) are of two kinds—woodland and cleared land. The former contains a greater or less amount of green timber, and is valuable for grazing purposes according to this amount—if much timber is standing in a growing state, less; if little, more. It is very difficult to state just here how many acres of this kind of pasture it would take to graze fifty head of horned cattle. I have had fifty steers to keep two hundred acres pretty well under; whilst another pasture of one hundred, with less timber, would keep equally well thirty-five. It will probably be necessary to have woodland pastures, as they are here, about double the size of cleared land pastures to graze the same number of cattle. Woodland pastures here are made thus: All timber except rare trees and sugar maple, are deadened. About the second year after the operation of deadening is performed, it is sown with blue grass seed (*pod pratensis*). The dead timber falls and rots in time, if not sooner removed. When these pastures are well cleared of all dead trees and old logs, they are very beautiful, and add greatly to the general appearance of the country. Nothing is more lovely as a landscape picture than one of those extensive woodland pastures well stocked with fine bullocks. They are certainly very valuable, at least when compared with the same lands in their natural state. Yet it is not difficult to over-estimate their value. This point, however, will be more particularly noticed hereafter. In preparing cleared fields for pasture, it is only necessary to give them a smooth surface and sow the seed in the fall, that it may root well before the dry hot summer months. This does not apply to clover, which is always sown here in the spring.

As there is certainly a difference in the nutritive qualities of the different kinds of grasses, it is important that the best should be used. There are other considerations also that should be properly weighed in making selections. Some soils are much better adapted to some varieties than others. The same may be true of climate, to some extent. It is also important, in the formation of pastures, to have especial regard to the time of starting grasses, and their time of ripening. All the grasses with which I am acquainted, after ripening, go a greater or less period without making any growth. To avoid any embarrassment on this account, grasses that ripen at different periods may be profitably used, as all continue to grow well until the seed has ripened. To this point we shall allude again.

Blue Grass—June Grass—(*pod pratensis*.)—This is the great grazing grass of this county, and of the State, and also of several of the adjoining States. Its qualities are so generally known that but little will be needed here. It starts early. Sheep are often turned to pasture by the 10th of April. It ripens about the middle of June. During the months of July and August, it makes but little growth; and if the summer is very dry, none at all. A pasture that would graze one hundred bullocks abundantly through May, June, and the first half of July, would lack very greatly of carrying

them through the following six weeks, or until the first of September. If no other pastures are to be had, the best way of remedying this difficulty is to pasture a field pretty closely until the first or middle of June, and then remove the cattle from it, and it will start up and remain green through August. If not pastured at all until the middle of July, it would still make good pasture for this dry period; but not so good as if pastured off in May; and then it is liable to another objection—there is so large an accumulation of grass, that it will burn like a prairie if fire gets into it.

This grass makes a very fine growth during the months of September and October. This grass grazes very profitably during the whole of the winter months, and is the best grass for this purpose known to our graziers. To make the best winter pasture, the spring crop should be pastured off close, until about the 15th or 20th of June. Some keep their pastures, intended for winter, from the first of May. This would probably give a greater amount of grass per acre; but would not be in so green and palatable a state as if the spring crop was pastured off, and it would be liable to burn in August if fire should chance to get into it. On such pastures I winter all my horses, except those at work; sheep also, except the snow gets very deep; cattle also, except in times when the snow is deep. I grazed a lot of one hundred and sixty-five the past winter, which was a very hard winter, with much more snow than usual, until the first of January, without any very perceptible loss in weight. At this time, I turned them upon a field of two hundred acres, upon which they ran until the 22d of January, when I removed eighty-seven of them and put them on corn—the remaining sixty-seven remained until first of April, when put to fodder. These cattle, whilst they remained on pasture, had no feed, except a little hay on some of the coldest days, the amount being quite trifling. There were nine horses on the pasture at the same time. About the first of April, the grass was found so nearly consumed that the cattle were, as above stated, removed to fodder.

Clover and Timothy.—I propose to place these grasses together for grazing purposes. Clover alone is apt to kill cattle, but mixed in equal parts with timothy rarely does any damage. It is safest to turn into it whilst it is but a few inches high, and then there will be no danger. In this condition cattle will fatten faster upon it than any grass that we have tried. I have a letter before me from Mr. A. S. Bryan, a very successful grazier, who says, "for putting on the most pounds in May and June, clover and timothy." These grasses do not make a very permanent pasture. The lifetime of a clover plant is only two years, and timothy will not stand close pasturing long, and there is quite a period from the tenth of July until the first of September that it makes no growth. It is quite otherwise with clover. These grasses are most profitably used on fields intended for grain in a few years. They are worth very little for pasture after severe frosts.

Perennial Rye Grass—Common Darnel (*Lolium perenne*), called here "English Blue Grass." This grass is cultivated here to a considerable extent, and is justly much esteemed. It comes on early in the spring, and makes a rapid and abundant growth. It springs up rapidly after being fed off and yields more grazing than the Kentucky blue grass. It ripens ten days later than the latter grass, and yields much better in July and August. Is much relished by cattle, and horses are quite fond of the ripe seed. This grass grazes quite well from May to the twenty-fifth of December, but not longer. I have been using it for thirty years and am more and more pleased with it. It also makes good hay. It is in no respect inferior to blue grass, except for winter grazing. In yield, or the amount of cattle that it will graze, it is much its superior.

Orchard Grass—Rough Cockfoot, (*Dactylis*

glomerata).

This one of our best grasses for grazing cattle. They are very fond of it and fatten well. It makes an early start and grows very rapidly when eaten off by the cattle. The growth on good land is remarkably rapid. It does well in the shade, and from this, probably, it has derived the name of orchard grass. It makes an excellent hay but is difficult to be mown, on account of its great tendency to stool. This may, however, be obviated by thick sowing. This grass is not largely cultivated here, but has given good satisfaction wherever tried. I have cultivated it for more than thirty years and am fully determined to increase my stock of it. In this latitude it will not graze longer than Christmas.—[Ex.]



Horse Department.

TROTGING VS. RUNNING HORSES.

ED. RURAL WORLD: I am heartily glad you have opened a Horse department in the *Rural World*. I want to see the best breeds encouraged and the best system pursued to develop their powers of speed and endurance. But I confess to a strong liking for the trotter over the running horse. Of what particular use is the running gait? Who wants to use a fast runner? Would a man once in ten years want to run his horse as fast as he could go? The fast running gait then is not useful; it is not needed in every day affairs; there is no demand for such a gait. But how is it with the fast trotter?

Does not every one who owns a buggy horse, like to have a little trotting speed? Does he not like to get over the ground tolerably fast? Even the venerable parson likes a good gaited trotter, if he rides in a buggy. And is it not so with a carriage team also. Because one has a fast gaited horse it is not necessary that he should use the fast gait often. Still he takes pleasure in knowing that the gait is there, and can be called upon at any time.

Again, who likes to see a horse with a moping, stumbling, slouchy trotting gait—one that can't get over the ground faster than a mile in eight or ten minutes. Is there any pleasure in riding after such a horse? Is there any profit in breeding such horses? For one, I prefer to breed to well-bred trotting stallions—that will impart fine trotting action with speed and bottom to their colts. Such colts or horses are always in demand. People like to own and use such.

Now I don't want to find any fault with race horse. They are horses of fine style and great bottom, as well as possessing great running speed. But the wrong gait has been encouraged. The galloping, running gait, has been used to the total neglect of the trotting gait—the most useful, the most practical of all gaits. Consequently the thorough-bred running horse lacks knee action—is stiff-kneed—can't trot a mile half as fast as he can run it. On this ac-

count he is not near as useful as he otherwise might be, and on this account I like to see well bred trotting stallions patronized by breeders. Their colts will prove more valuable. Not one in twenty of the thorough-bred colts ever make winners; and unless they become winners their value is not high. They make, it is true, nice saddle horses—nice, but slow buggy horses; but never command high prices for buggy or carriage horses.

RUSTIC.

TRAINING COLTS—WHAT HORSES TO GET.

We compel our horses to do this or that—and it is like compelling a man: he does not like to do it, and therefore does not do it well.

Some horses are vicious by nature: these should be avoided. It is no excuse to say they exist, and we must take what offers. There is good blood, and of sufficient variety to select from; the stock itself may, to a considerable extent, be purchased.

To break a vicious horse of his vices, is to break the horse, not the vices. These are nature, so to speak. An awkward horse will be awkward to the day of his death; an ignorant horse will improve but little in knowledge; a slow horse can be made to go fast for the time being—but the horse worries, and at the first chance settles down into the old gait again.—He is a burden to himself and to his owner. Horses "hard to keep" are too well known to need comment.

What is wanted, can be had generally by a little trouble—to a greater or less extent at least—such are the advantages now-a-days in most parts of the country. Our railroad facilities add greatly to this.

It is the blood then that we want, secured either in the colt or in the horse. If a proper horse can be secured—that, we hold, is a great gain, where a beast for immediate use is wanted. Better pay more than the value, if he is ready of access and can be turned in at once to advantage; it will save time and needless worrying. But if the want of a horse is not pressing, a farmer, in general, can better raise his own stock, especially on a small scale. In such case secure what advantages are within reach. Secure, not at random; select. Go to a friend who is a judge of horses (if you have such a one), and acquaint him with what you want. Ten to one he will tell you just where to go—at least benefit you more than if you were left to your own judgment, or those who knew still less, who usually "know the most." Trust these never; trust those only that are reliable.

There are many good roadsters known.—Such names as the Morgan, Black Hawk, Ethan Allen, the Hambletonians and the Abdallahs, are as familiar as household words. The trotting influence of the day is developing still more the quality of the roadster. And the roadster meets many wants of the general farmer. It is not mere draft that is wanted now. A horse with some mettle and easy carriage will do more on the farm than the heavier horse. The last is desirable only where heavy drafting is to be done. From our roadsters then we are to select generally; and there is no lack of them.

In training colts, it is getting to be understood that the tuition of a horse must begin with his life. He then grows into it, and it becomes nature as well as the blood within him, which received its quality by care on the part of the breeder—so that the breed is but the more perfected by such early tuition. This makes a horse, more than all things, and what is so desirable—reliable. Every horseman knows the value of this quality—a horse that you can trust, not only anywhere, but at all times. Such a horse, if otherwise good (and he is apt to be), is worth his "weight in gold."

The first requisite in the education of a colt is, kindness. This he appreciates—and it will attach him. When attached, you can control him. He trusts you; he is not afraid you will hurt him. If he is afraid, he is not himself—fear unbings a horse at once, and he becomes wild, furious, if permitted to carry out his fear to its full extent. This is the "pulling" horse, the "runaway." He knows not what he does. He is impelled by a fear that admits of no will at all on his part. He is driven as by a storm, and just as reckless. All this is avoided if the confidence of the horse is secured, as it can be only by kindness. Then never belie your treatment; never contradict yourself. If you do, you will but baffle your own efforts, and embarrass your horse, which will be at a loss, and have a temptation presented to become vicious. He is intelligent; and he must not have his intelligence outraged. If he has mettle, he will resent it. Give him your confidence—be his help-mate and friend, and direct him in what is practicable and reasonable, at least at first. If he exhibits stubbornness, you must let him know that you are his master—and, if you can, that you are for his best interest. This last, by frequent repetition of good following obedience, will do more than aught else to restore confidence. He will thus learn to trust you in all cases; you will trust each other; the company of your horse will be fellowship. That intelligent eye of his; those fine, sensitive limbs; and that noble heart: you like to be in such presence. And you are—you will be there—and not too often for the horse, who expects it. Thus you become, as it were, one—and you cannot help to be that in effort. Such a horse will do what you wish him to do. You feel his labor; you are therefore merciful towards him, and do not overwork him. And the horse, if he has mettle, as he should have, will, with pleasure, do his part. The horse then becomes a support, a reliance. You cannot part with such a horse—with such a member of the family. You therefore keep him. And at thirty he will do the work of an ordinary horse in his prime—for such a horse, taken care of, will last. A span are a "team;" and you can do almost anything with such a pair of servants.

Is it, then, important to get the true, tractable, mettlesome blood? or get a brute? Such a horse will be a brute and a burden, as well as a great aggravation, during half of your lifetime. He will be neglected; he will not do your work properly; and if he is not too stupid to be vicious, he will cut you up tricks enough to pay double for his perhaps already double keeping. He is a damage: avoid him.

Some people have their system of training colts. Each, generally, has his own, which varies with that of his neighbor—and each may have its advantages: but general principles must apply to all. Rarely must be present to each one—not necessarily in detail—but the principles aimed at. And each man must have judgment of his own how these principles may be directed. If he has it not, he is hardly fit to keep his horse even after it is trained.—For a horse, well trained and taken from its master, whom it has learned to love, cannot afford to be abused. The horse is noble—keep him so—develop him fully. Do it as you would your child, and he will reward you. He will be to you not among the least of the profits of the farm.

A FAMOUS HORSE SOLD.—The famous trotting horse Melton, the pride of the Canadian Turf, lately owned by Mr. Simon James, of this city, has been sold to leave the Province for the round sum of \$8,500 in gold. The purchaser is a lady of sporting proclivities, residing at Kalamazoo, Mich., who is also owner of the American trotting horse Gray Eagle. She first witnessed the performances of Melton at the grand horse meeting in Buffalo last season, and has since been persistent in her determination to acquire possession of her favorite until the offer of the large sum mentioned overcame the owner of the animal. Melton distinguished himself at the Buffalo races last season winning one of the grand purses against a field of renowned competitors, and was undoubtedly entitled to rank as the king of the Canadian Turf, which reputation his late owner confidently anticipated he would maintain the present season more effectively than ever before. Mr. James started yesterday with Melton in charge, to be delivered to the purchaser at Kalamazoo, she also paying the duty, which according to the present tariff of 20 per cent, will amount to the item of \$1,700, making the total cost of the horse \$10,200.—[Hamilton (C. W.) Times, May 16.]

[Written for Colman's Rural World.]

Sugar from Sorghum. Weak Eyes in Horses.

ED. RURAL WORLD: I wish some one of the readers of your journal, would tell me whether any sugar can be made out of sorghum. I am a new beginner and would like to try it. I believe making sugar will pay better than the syrup.

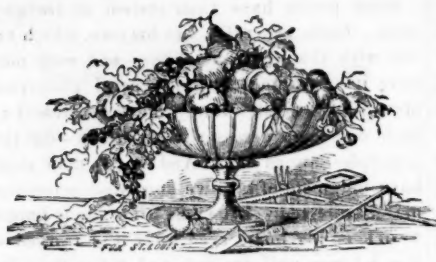
To your correspondent, who has a young mare with weak and bad eyes, I will state that this disease arises from different causes, such as taking cold, rheumatism; sometimes it is transmitted from parents, which is hard to cure. If there is inflammation, tincture of Arnica is the best to reduce it; 60 drops to a teacup of water, bathing the eye every half hour till the inflammation is reduced.

Franklin Co., Mo.

NEW BEGINNER.

MARES LOSING THEIR FOALS.—This seems to be prevailing to a very great extent in Platte County. A correspondent gives quite a number of cases, and thinks that its apparently epidemic character is, to a very great extent, attributable to contact, but is sometimes traceable to smell alone.

In hog cholera, the same writer recommends giving two grains of arsenic to each hog, each day for ten days, and advises changing their sleeping places.



HORTICULTURAL.

[Written for Colman's Rural World.]
**ARTISTIC BOTANY, THE KEY TO
 CORRECT PRUNING.**

BY WM. MUIR.

The propriety of calling attention to a subject so common, and upon which so much has been said and written, may be held as open to question; but it has been felt a difficulty of no mean magnitude that almost all that has been written has been by men so thoroughly educated in the art, that they fail to appreciate the difficulties of the amateur, who has to feel his way alone, and on whose mind a correct image has never been formed. Were we to undertake a journey on foot to California to realize its golden harvests, we would hardly expect the information most suitable to us from those who had "doubled the Cape," or crossed, with all the ease and rapidity of modern travel, the Isthmus, or the modern Overland Express; we would rather seek the footsore traveler for information, though of much inferior mental culture or capacity and his terms less refined—because his information would be more fitted to our wants and circumstances. We find this the case in almost every work we take up on the subject. We may find some plain instructions as to how to hold the knife and branch; how to draw the cut, whether on the inside or outside; or may be reminded to restore the balance between the roots and branches, so much disturbed in transplanting; and even when engravings are given of different forms of training, there is still a want felt, and it is to this want that we wish to call especial attention.

The amateur gets his three or four year old trees from the nursery, which (in the hands of an expert, trained for many a long year to the business, till he knows almost by intuition how to cut,) may be made a tree; but to nine out of every ten who have to use the pruning knife, is a mystery, how to cut so as to produce the effect desired. There is in these cases no lack of thought, of reading, of study, on this matter; but still there is no certainty in the production of the results desired. We find many who know how to cut—many who are always whittling at trees: but few who can prune. How is this? Because the mind has never had a correct *Ideal* presented to it. How could the sculptor have produced a Venus or Adonis, or the painter created a Madonna, had their minds been habituated to malformation and deformity in the living being? Could the flattened brow, the chub nose, the crooked spine, the deformed limb, ever fill their souls with

the glorious conceptions that are embodied in those masterpieces of art? Or could the physician ever minister to the wants of the diseased, who had not thoroughly studied the laws of health?

It is from this point of view that we see a deficiency in all the works on pruning that have come under our observation. The mind fails to get what it must first have in order to correct action—a clear perception of the proper natural development of a tree.

We ask, in order to fix the attention on this point—Does nature present an *Ideal* for our guide in this, and has science discovered that *Ideal*? We answer, YES, to both parts of the question.

Artistic Botany shows that Beauty, Order and Harmony are manifested in every department of the vegetable kingdom. They are found alike in the symmetrical development of the foliage, the transcendent loveliness of the blossoms, and the grateful combinations of excellence that make up the fruit.

The study of Artistic Botany first hinted what following researches have confirmed—that every variety of plant has an absolute distinguishing individuality in its foliation; every leaf stands round the stem, and from it derives its sustenance, and is the shield, the nurse of a bud, which, in its development, becomes a branch. These leaves are placed round the stem in whorls, that in the variety are always in determinate series, which are sometimes very simple, sometimes complex. In other cases the leaves are simply *opposite* each other; sometimes *opposite* and *alternate*. The pairs of leaves are placed on the opposite sides of the stem, and the next pair placed in a crossing direction. Sometimes they are placed in vertical whorls on the same plane as in the Woodruff, Cleaver or Blackroot, as seen in Fig. 1; or the circle



Fig. 1.



Fig. 2.

of leaves may be set at distinct intervals along the stem, as in the Apple, Cherry, &c., in which the leaves are set in a spiral whorl of five leaves, so that every sixth leaf is placed vertically to the first of the series, as seen in the engraving Fig. 2. Some of the most common of these developments may be quickly comprehended thus: take a piece of any straight, well-developed stem—a piece of apple or cherry one-year old wood—cut off at half an inch below a bud; slit the end to the base of the bud; put a thread, with a knot, to prevent its slipping through, into the slit, and wind it round the stem, causing it to pass over every bud till it comes to the bud on the same edge as the first bud, which will be the sixth, and you will find that in doing this, you have made two revolutions on the stem, and that five leaves completes the whorl of foliation, and if no accident

has produced malformation, every sixth leaf will be over or in a line with the first; the second with the seventh, &c.; from the top to the bottom of the growth. The mode of foliation is conveniently expressed as a fraction—the number of revolutions being the numerator, and the number of leaves the denominator: 1-2 1-3 2-5 3-8 5-13 8-21 13-34 21-55, &c. In the apple, &c., it is 2-5. Or, if we look down on the properly developed stem of a plant, so as to bring all the leaves in range, we will at once see the number of leaves that completes the circuit of the stem.

In this we have the true ideal of apple growth. The straight stem of the first year's growth, describes its whorl of leaves in two turns round the stem, in which five leaves can be counted.

In the axil of the present leaf the bud is formed which develops the branch of the succeeding season—and, other things being equal, we will have a bud and branch for every leaf on the straight stem—and we have the branches set at an angle of 72 degrees. If we remove the buds on the lower part of the stem, and cut the top at the height desired, we can "set" the head, which may consist of a single series or more, as the head is desired open or conical, or the habit of the variety is erect or drooping. Or, instead of forming the head of a single series, we may have to take every second or every third bud, and must of course allow two or three series of buds; but this will not alter the symmetrical arrangement of the branches.

The development of the buds on the branches being the same as on the stem, we follow the same course—but will find it necessary to remove crossing growth, or that which is too crowded—and the cutting out of upper or under side buds will depend much on the habit of the variety.

One fault is prevalent, particularly with those that can never see a tree without the desire to whittle it; viz., the "stumping in" of the growth of the main limbs, causing the development of an unmeaning mass of brush, which of course must be cut out, causing the determination of the sap in large quantities to a few points—thus producing wood growth or "water sprouts" which afford fresh food for the knife. While a judicious removal of irregular growth, would throw the sap equally over the buds, and tend to much earlier fruitfulness, as well as produce a finer form.

Let us familiarize our minds with this normal development, and we can go with confidence to an abnormal condition and bring it to this normal standard with more or less certainty, depending on the condition of the subject we have to operate on. It will now be seen that we have a *standard* in our mind, and a *mode* of bringing our work to this standard with the certainty of uniform results.

In saying thus much, all that is really needful is said. We may remark, however, that the successful application of this course will necessitate care in the selection of trees in the nursery, particularly with reference to their age and development.

The development of the root system is a true counterpart of the branch system, and the ac-

tion of the one on the other is reciprocal. The normal condition of the roots present a similarly whorled character with the branches, and appear as in Fig. 3, being series of main branches and smaller diverging rootlets.

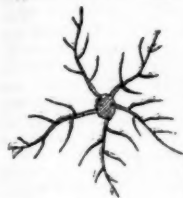


Fig. 3.

In the nursery row during the second and subsequent years, the buds on the stem facing the other trees in the rows, are not so uniformly developed as those on the other sides, and at the same time the roots are crowding upon each other in the row; and if the trees remain long in these first nursery rows, or are carelessly taken up—the roots are stumped off, the branches misplaced, the lower buds rubbed off, and then we have the trees that are "puffed as from 5 to 7 feet high, and ready for bearing in a year or so," put into the hands of the anxious planter to try his skill upon. What would the experienced horticulturist do with such stock? If the fence was *low enough*, throw them over it, and thus end his perplexities at once, instead of having them extended over the whole course of their miserable existence. When necessitated to manage such subjects, we have found strangling with a piece of wire a much surer way than cutting back the head at once; by this method we can frequently develop buds in their proper places. That plant life, like animal life, can adapt itself to unnatural circumstances, and still exist, is cause of profound astonishment; and this fact explains—not why so many of such trees die, but why any of them live at all. Death is a merciful institution in nature, by which forms of life that are so far impaired as to become a burden to their possessor—a source of grief and not of enjoyment—are forever removed from this imperfect condition.

The views here dimly shadowed forth, may not command the study of those whose horticulture affects them no higher than their "breeches' pocket"—will find no sympathetic relation with the mere *whittler*—with those who can see only "good for food" written on the tree by its Creator: but to those who have a double enjoyment in the full appreciation of that God-like munificence that designed a pleasure to accompany all useful labor—who reflect with interest on the time when "out of the ground made the Lord God to grow every tree that is *pleasant to the eye* and good for food"—it will be suggestive of instruction.

Can we conceive of what this first Great Master of the Garden would say of the miserable distorted specimens with which the ground is cumbered, or the distorted minds that can tolerate them. This may be called enthusiastic, but we may rest assured that with Beauty and Harmony go Health and Fruitfulness—and these are crowned by Longevity. And not only is economy thus best secured, but those who find enjoyment in the study of the Plant Life of this lower world, may be able to contemplate those trees "bearing twelve manner of fruits, yielding fruit every month, and whose leaves are for the healing of the nations"—for Heav-

en itself is never pictured by any race without presenting trees and fruits as objects of desire and sources of enjoyment—and these are not to be found in the miserable specimens now so common.

Treating Grapes for Wine.

It is an excellent practice to remove from the vine all grapes that are backward, even if they are large clusters, as this will more readily secure the great requirement—uniformity of ripening—so that no grapes need to be picked and worked up before the general gathering. This will add vigor to the rest, hasten maturity and enlarge the growth. It will lessen the labor at the time of gathering, and leave less unripe and unfit fruit. Then—if the fruit is permitted to hang till the stems of the clusters are turned brown, and the fruit assumes a more lax, pendant condition, the skin becoming as in a well baked apple, thin and transparent, and the juice assuming a matured, vinous condition, sticky to the fingers—there is no use in letting ripening go farther—the time for making wine has arrived.

Further; it is with wine making as with butter; absolute cleanliness is necessary. To this end, only the ripe, perfect grape must be used. Avoid even the dew—and the least appearance of odor in the vessels. Bruising at the time of gathering hurts the homogeneity and body of the wine. A respectable authority says a bit of bread will spoil a whole pressing.

We have said thus much, more for the small grape grower than the professional wine maker. As to the apparatus necessary, we will not enumerate them, as they have frequently been mentioned. We wish to impress upon the mind of the uninitiated the necessity of what is so apt to be neglected—*care and cleanliness*, and the means of producing *good fruit* fit for wine. We prefer vegetable, rather than animal, manure; and a fair, not superior, fertility, with a good portion of clay and lime—clay especially.

[Written for Colman's Rural World.]

DIRECTING YOUNG TREES.

We say of the education of youth, as the twig is bent, the tree's inclined; but we forget to apply it to the tree itself. And yet here is the original, vital fact, as old as time itself.

To cut away wood after the tree is grown, is to lose that much. This might have been spared, and the tree receive in its proper place what was thrown away on the superfluous limb. The tree would have been that much the larger; would have been in better shape; and would not have been hurt by the shock of amputation.

Prune when the tree is a child. Prune then with thumb and finger; the hurt will be but a scratch, and will not injure the tree—the constitution will be unimpaired.

This is, in effect, nature's plan, or nearly so, which she has acquired from time immemorial, and which has become established. To break it up, is to shock the tree—shock it to its centre. If the pruning takes half of the tree, it will be severe. If the other half is taken, it

will kill the tree. So the constitution is effected in the ratio of severity with which you prune, beginning with the thumb and finger and ending with decapitation.

Here is a chance not only for favoring the vigor of the tree, but for adorning it, adding grace and symmetry. The eye must have something as well as the pocket. And this tree of beauty and proportion will do better for the beauty and proportion, which favor the air and the sun, perfecting what can otherwise not be perfected.

Such a tree, made by mild treatment, begun in youth, will show no scars, no wounds, for the water to sit in and rot. It will be healthy, hardy and whole; it will be proportioned, handsome, and profitable; and it will be enduring.

It is only when age or disease require the removal of limbs, that rash pruning is to be resorted to—this, to rejuvenate the tree. It is better than to let the tree be ruined, by leaving it to disease and the influence of age.

A young tree may grow too thriftily, so as to prevent maturing of the wood; or too slowly. This should be regulated by the soil rather than the pruning knife. A rich soil will not generally do, especially in low situations. Too much culture may be applied to such soil, as we have known trees to improve in fruitfulness by permitting a sod to cover the ground. This is more particularly the case where the soil is deep, as we also know by experience. The sod is better than to resort to root pruning, which is another rashness that may be temporarily remunerative, but is laying "the knife at the root of the tree"—a partial death, as is all pruning to insure fruitfulness. The latter, however, which includes summer pruning, may in some cases be necessary, and on the whole advantageous; but with the writer it is a matter of doubt. A proper soil, and tender pruning, with a good, airy locality—high success may be attained, and that for a longer series of years than rash treatment or pressure can secure. It is only in the exceptional cases of disease or mishap, and old age, that harsh means should be resorted to, F.G.

Illinois State Horticultural Society.

The Executive Committee of this Society met at the residence of G. H. Baker, South Pass, May 21, 1867.

The Secretary stated that the Committee, by correspondence, had agreed on Tuesday, Sept. 3d, as the day for the State meeting. A discussion followed, affirming the action so taken.

In view of the expected Exhibition to be made in St. Louis, in September, and the impracticability of applying the State appropriation to a joint exhibition to be held out of the State, it was voted that the annual fair be postponed this year.

It was further, Resolved, That a committee of three be appointed to see that the fruits of Illinois are properly represented on the tables of the American Pomological Society at its approaching meeting and to confer and act with any committee appointed for the purpose by the Missouri State Horticultural Society in the

matter of a joint exhibition on that occasion.—W. C. Flagg, E. S. Hull and John M. Pearson, were appointed the committee.

The following resolution was unanimously adopted, and the Secretary instructed to send a copy of the same to Governor Oglesby.

Resolved, That the Executive Committee of the Illinois State Horticultural Society, in view of the immense damage now daily done by the ravages of injurious insects, respectfully and urgently request the Governor that he will, if consistent with his own views of duty in the matter, appoint Dr. Benj. D. Walsh, State Entomologist, under the act of 27th February, 1867, that he may immediately enter upon the duties of that office.

It was further Resolved, That the President of the Society be authorized to engage Dr. Benj. D. Walsh to immediately commence entomological investigations in relation to horticulture; and be empowered to pay out for that purpose a sum not exceeding \$500 from the legislative appropriation. This action is taken to insure action in case of a failure to appoint.

It was further, Resolved, That an appropriation of not over \$100 be made to pay expressage and other expenses on fruits, &c., that may be sent to the American Pomological Society's meeting from this State.

It was further Resolved, That \$500 be appropriated to pay the expenses of the Committee *ad interim* and of the Committee on Grape Rot, Peach Rot and Pear Blight.

Parker Earle, W. C. Flagg and E. S. Hull, were appointed a Committee to report at the next annual meeting on the feasibility of an early effort to obtain an endowment for our Society as voted at last meeting.

The Secretary was instructed to prepare under the direction of the President, a circular giving notice of the time, place and programme, of the next annual meeting, and to correspond with several eminent horticulturists with the view of securing their attendance at the meeting.

It was further Resolved, That the travelling expenses of the Executive Board in attending this meeting, be paid. Adjourned,

ELMER BALDWIN, President.
W. C. FLAGG, Secretary.

GRAPE VINES.—In consequence of the frost cutting off so much of the young growth of the vines, close watching will be necessary to see that no misplaced shoots will be allowed to grow. Rampant shoots will be found starting at the ground, and in many cases absorbing the sap that otherwise would have pushed latent buds to take the place of those killed, and which, if these rampant growths remain, will run the risk of being "starved out." Of course it will be necessary to see that there is a bud to push before removing this growth.

Sow corn in drills or broadcast, in ground nicely plowed and harrowed, for your stock to eat if we have drouth in Aug. and Sept. If we have no drouth, cut in October, cure and put away for winter fodder. Nothing is better for all kinds of stock.

UNPRODUCTIVE PEAR TREE—*Ed. Rural World:* I have a standard pear tree nine years old that bears no fruit. It continues to grow very vigorously—but I want some pears from it. What shall I do to make it bear? S.

ANSWER.—The most certain way to throw it into bearing, is to dig a trench around the tree about four or five feet from its body, cutting off the roots of the tree. The trench should be a couple of feet in depth and a foot or twenty inches in width. This would check its growth and cause it to form fruit spurs. Root pruning standard pear trees is highly recommended by all pear growers, particularly for kinds that are tardy in coming into bearing. Summer pruning the tops is also beneficial. This is the best season for both root and top pruning.

Alton Horticultural Society.

ABSTRACT OF PROCEEDINGS.

THURSDAY, MAY 2D, 1867.

W. C. Flagg, from the Committee on Orchards, presented the following report:

That they find on the farm of Mr. Smith, some 1300 apple trees, 1300 peach trees and 300 pear trees, all in good, or very good condition. The ground was prepared for the apple and peach orchards by thorough plowing, and in the fall of 1861 some 800 apple trees and 600 peach trees were planted. In the spring of 1866 most of the remainder were set out. The apple trees are set at the distance of 32 feet apart, and the peach trees are planted in the rows, making the distance apart of the two sorts 32 by 16 feet. The principal varieties of apple trees planted are, Rawles' Janet and Newtown Pippin. The principal varieties of peaches are the Crawfords, Large Early York, and Stump the World. The pear trees, of several varieties, are scattered over the lawn, and planted on the slope northward, they look very thrifty and handsome.

In cultivation, the apple and peach trees have been mostly in plowed crops, the earth being thrown to the trees, so as to leave them now upon a considerable ridge—a convenient arrangement for getting rid of surface water. Some trees, kept in grass for a time, are less thrifty, but the majority look quite vigorous and strong. The pruning perhaps not been the best possible. Your committee believe pyramidal pruning of nearly all trees to be preferable in this climate, as most in agreement with the natural tendency of trees and best calculated to make a strong tree, and ward off the rays of the sun from the trunk.

ORCHARD CULTURE.—Orchards in this climate, until some years old, are generally cultivated, by the best orchardists. The apple orchard can be generally plowed annually without danger. I have found the Fall Wine, Hubbardston Nonesuch, and perhaps one or two other varieties, to injure by bark bursting when highly cultivated, but most varieties endure high culture well. In northern latitudes, however, even apple trees will winter kill under such treatment. Pear orchards are more subject to blight when overgrown as young trees, and hence there is a tendency not to cultivate them annually. Cherry trees, on account of overgrowth, are sometimes neglected. Peach orchards, on account of their uncertainty as annual bearers, are more capriciously treated.

A few rules, however, we think it will be admitted, should be followed in the care of nearly all orchards in this latitude and on this soil.

1. An orchard should be kept in a state of healthful growth to insure good fruit.
2. Healthful growth is best insured by at least one plowing each year. Manure or mulch will produce the same result, but not so well.
3. The plowing should be done in April or May, and for the best results; when the orchard is fruiting, the surface should be kept stirred with the cultivator or harrow, as late as is safe.
4. There should be no plowing after the first of July; and except around the base of the trees (where a circle of two feet in diameter should be kept bare of all weeds or other shelter of bracers) it is better that a late growth of grass, &c. should be permitted to grow up in fruiting orchards, to prevent the too rapid radiation of heat, which, when the surface of the ground is bare, is dangerous to fruit buds and blossoms.
5. Corn is the best crop to cultivate in a young orchard, unless it may be white beans. Potatoes are

objectionable, because the digging of them stirs the ground and incites growth in the fall of the year. Small fruits may be grown in a young orchard before the time of its bearing, with good results.

6. Red clover is probably the least injurious of crops not cultivated, especially if not removed from the orchard. On hilly ground, where the surface washes, as in lower Egypt, it seems a necessary evil. Mr. J. Huggins, chairman of the Committee on Entomology, presented leaves of currant, evidently diseased—cause to him unknown. The leaves were marked by reddish-brown blotches of irregular form; the surface, whenever attacked was raised up and thickened. Mr. Kingsberry has had the same appearance on his currants for the year past.

Mr. Huggins also presented "canker worms" in full activity, but as yet very small. He wished it distinctly understood that they were not gathered on his grounds, but were obtained from a neighbor.

Dr. Hull presented specimens of the Graptodera chalybea, or steel-blue flea beetle. He had found them very numerous. Has had them in his grounds for some years, but was not aware of their habits until taught by experience, and had not consequently looked to their destruction as a necessity. The experience of last season was of such a character as to leave no doubt but that to grow grapes successfully they must first be destroyed. The spring of 1866 they were very numerous, and before he was fully aware of his danger his grape crop was nearly destroyed. This spring, in a small vineyard, one of the first planted, they swarmed by thousands, and he had burnt them out by surrounding them with fire and letting the fire run in the dry grass through it. It was a rough remedy, but as his crop was destroyed, he let the beetles follow suit.

Many remarks were made, urging the destruction of this insect enemy. This and the canker worms were especially pointed out, and early, ceaseless warfare strenuously urged.

Dr. Hull stated that the Tettigonia vitis, or grape vine leaf-hopper, made its appearance with him on the 16th of April. This, says Dr. B. D. Walsh, in the "Practical Entomologist," is what has been mistakenly called "Thrit" or "Thrips," by Western horticulturists.

President Pearson reported that he had found upon trees purchased in St. Clair County, some bark lice, or rather the eggs, under a seeming scale; he found eggs which when broken gave out a red colored juice.

An animated and interesting discussion then ensued upon the tent caterpillar, and fall web worm, which were unanimously recommended to the attention of all fruit growers, as worthy of diligent attention. The habits and characters of these worms were readily distinguished, and the fact was plainly made apparent that there soon would be another claimant for orchard products, besides the owner, if these worms were allowed their way.

[Reported for Colman's Rural World.]

Mississippi Valley Grape Growers' Association.

Court House, St. Louis, Mo., May 22, 1867.

An adjourned meeting of those favorable to the organization of a Grape Growers' Association, was opened at 11 o'clock, A. M. In absence of the President, the Secretary called the meeting to order, and the Rev. C. Peabody was, on motion, called to the chair.

The minutes of the former meeting were read and approved.

Dr. C. W. Spalding, Chairman of the Committee on Address and Constitution, read the following report:

The committee appointed at the preliminary meeting held January 10th, 1867, report that they issued a circular in April, of which the accompanying paper is a copy. They also now present a draft of a very brief constitution for the consideration of this meeting.

C. W. SPALDING, Chairman.

TO THE GRAPE GROWERS OF THE MISSISSIPPI VALLEY.

A meeting to effect an organization of grape growers was held at St. Louis on the 10th of January, at which the following resolutions were unanimously adopted:

Resolved, That it is expedient to organize a society for the promotion of grape culture in our State and its vicinity.

Resolved, That a committee of five be appointed by the chair to prepare a constitution and by-laws, and report at a future meeting.

Resolved, That this committee be instructed to prepare and publish an address to the grape growers, showing the necessity of such an organization.

Resolved, That the next meeting be held on the fourth Wednesday of May next.

The President appointed Dr. C. W. Spalding, Rev.

C. Peabody, Dr. C. N. Andrews, E. A. Riehl and O. P. H. Lear said committee.

It was resolved that the president be ex-officio a member of said committee.

In compliance with the foregoing, the undersigned cordially invite the grape growers of Missouri and the adjoining States, to assemble at the city of St. Louis on the fourth Wednesday of May next, for the purpose of organizing the association contemplated by the above resolutions.

This branch of horticulture has already become so large, and the amount of territory in this section adapted to the successful culture of the grape is so very extensive that the necessity for such an organization has long been felt and acknowledged. The time seems now to have arrived when the benefits arising from the operations of a society devoted exclusively to subjects connected with the grape are too evident to require elucidation and too important to be longer neglected.

Hitherto our horticultural societies have been too much engaged in the discussion of other topics to devote sufficient time to the proper consideration of those relating especially to the grape. And all who are interested in viniculture have felt the want of a more full discussion, and a wider comparison of the different modes of propagation, culture, etc., than can be had in any of the existing societies.

The season of the year, too, at which such meetings are usually held is not the best for an advantageous display of the products of our vineyards, being too late for grapes and too early for the young wines of the previous season.

It is hoped and believed that such a society as it is now proposed to organize, will be able to offer such liberal premiums for both grapes and wines, as shall invite and secure competition from so wide an extent of country, as to bring together not only a large number of varieties, but, also, to afford an opportunity for comparing the products of the various soils which are known to exist in this region, and of determining the relative merits and capabilities of different latitudes and localities.

Much more might be added, but enough, we think, has already been said to show the propriety of adopting the measures proposed, and we trust the grape growers of the valley of the Mississippi will generally respond to this invitation, and come in such numbers as shall attest their devotion to the interests of their ennobling pursuit.

C. W. SPALDING,
C. PEABODY,
C. N. ANDREWS,
E. A. RIEHL,
O. P. H. LEAR,
Committee.

Mr. Husman, President pro tem., having arrived, took the chair.

The Report was Received, and the articles of the Constitution were, on motion, taken up seriatim and adopted.

CONSTITUTION.

Article 1. This association shall be called the Mississippi Valley Grape Growers' Association.

Art. 2. The officers shall consist of a president, vice president, secretary, treasurer, and an executive committee of five, exclusive of the president, vice president and secretary, who shall be members of said committee, ex-officio.

The officers shall be elected annually by ballot and shall hold their offices till their successors are chosen.

Art. 3. The executive committee shall have charge of all exhibitions held by this association, and when premiums are offered, shall report a list for the action of the association, and discharge the duties of an ad interim committee.

Art. 4. It shall be the duty of the secretary to notify the members of the time and place of each meeting of the society.

Art. 5. The annual fee for membership shall be two dollars, payable at the annual meeting. Each member will be entitled to a ticket of admission to the exhibitions and to a copy of the transactions of the association.

Art. 6. Special committees shall consist of three members each, and be appointed by the chair unless otherwise ordered by the society.

It was, on motion, resolved, That the Association proceed to the election of permanent officers. Whereupon, the President appointed Messrs. Tice and Peabody tellers, when the following officers were declared duly elected: President, Dr. C. W. Spalding, St. Louis; Vice-President, Geo. Husman, Herman, Mo.; Secretary, Wm. Muir, Fox Creek P. O., St. Louis Co., Mo.; Treasurer, J. H. Tice, St. Louis. Executive Committee—John H. Tice, St. Louis, Mo.; Tom. Walker, Jefferson Co., Mo.; Dr. E. S. Hull, Alton, Madison Co., Ill.; N. W. Bliss, Warsaw, Hancock Co., Ill.; Philip Eisenmeyer, St. Clair Co., Ill.

Mr. G. Husman presented a letter from Col. McKissock of the Pacific Railroad, expressing his warm in-

terest in the development of grape culture in Missouri, and according free return tickets to those in attendance, on the certificate of the Secretary.

It was, on motion, Resolved, that a committee of one be appointed to wait on the Superintendents of the other railroads with a view to secure the same favor. President appointed Rev. Chas. Peabody said committee.

Considerable discussion was had on the question as to the Fall Exhibition of the Association being held at the same time, and in connection with the meeting of the American Pomological Convention, to be held on the 11th of September next, when it was finally resolved,

That this Association hold a Wine Exhibition in this city at the time of the meeting of the American Pomological Society.

John H. Tice presented the following resolution: Resolved, That the members of this Association be requested to observe the meteorological condition of the atmosphere during the summer months—that is, its temperature, hygrometric and electric conditions, with a view to ascertain whether diseases of the grape have any connection with the same. Which after considerable discussion was adopted.

Dr. Morse presented the following resolution, Resolved, that the annual meetings and wine exhibition of this Association be held on the first Wednesday of May. Adopted.

Dr. Morse moved that a committee of three be appointed on New Varieties. Lost.

Mr. Husman moved that the President appoint two committees of three each, one to examine and report on Red Wines; the other to examine and report on White Wines. Adopted.

Dr. Claggett moved that a committee of three be appointed to report on the soils best adapted to the growth of the grape. Adopted.

President appointed Messrs. Claggett, Andrews and Riehl said committee.

Dr. C. N. Andrews moved, that a committee of three be appointed to extend the courtesies of this Association to the American Pomological Society at its next meeting to be held in St. Louis, and that the President be chairman of that committee. Adopted.

Dr. Claggett moved, that standing committees be appointed on soils, varieties, insects, pruning, and modes of culture, &c., with instructions to report to regular meetings, which, after considerable discussion, was lost.

Dr. Morse presented bill for test glasses and basket for use of the Association. Ordered to be paid.

J. M. Jordan suggested that the committee appointed to report upon wines be instructed to call for, and give as far as possible, information as to how the several samples are manipulated, and state the defects in inferior grades as well as the excellencies of superior samples.

Dr. Morse proposed that the two committees upon wine, when appointed, be instructed to report standing rules by which wines shall be judged. Adopted.

President announced the following committees on wine:

Red Wine.—L. D. Morse, E. R. Mason, N. W. Bliss. White Wine.—E. A. Riehl, H. Roesch, J. M. Jordan, Adolphus Engelman.

Mr. Husman moved, that a committee of ten be appointed to solicit money to form a fund for premiums on native wines. Adopted.

President appointed the following gentlemen as said committee:

N. J. Colman, G. W. Simpkins, J. M. Jordan, all of St. Louis; Dr. W. S. Dyer, Vineland, Jefferson county, Mo.; Wm. S. Jewett, Pevely, Jefferson county, Mo.; George Husman, Gasconade county, Mo.; E. A. Riehl, Alton, Madison county, Ill.; E. Engelman, Shiloh, St. Clair county, Ill.; N. W. Bliss, Warsaw, Hancock county, Illinois.

Dr. Hull introduced the subject of Mildew and other diseases of the grape, and the necessity of widely extended microscopical observations as to its cause, progress, &c., which elicited considerable discussion.

Whereupon, it was Resolved, That this Society instruct the President to purchase and use, or put in the hand of such of the members as will use it, a Microscope to study the Diseases of the Grape, whenever the funds of the Society will justify so doing.

REPORT.

The Committee on Wines to whom was referred the subject of Rules for Judging of Wines, submit the following report:

We recommend that when wines are presented for judgment by committees, they shall be received by the Secretary, and by him or a duly appointed assistant, shall be marked and labelled as follows—all other marks being removed: Each bottle shall be labelled with the name of the grape or grapes from which the wine was made, the date of the vintage, and a number which shall correspond with the same number on a list which shall be on file with the Sec-

retary; said list shall contain, so far as exhibitors are willing, a statement as to the variety, the soil, locality and method of making said wine. The labels on the bottles of wine shall be in one hand-writing, and the Committees shall give their judgment in figures on a scale from one to ten, in accordance with the numbers on the labels, and then, before making out their report in extenso, shall compare the same with the list in the hands of the Secretary, and give such facts and conclusions as shall be deemed of public interest.

It shall be understood that the Wine Committees in judging in the scale of 10, shall consider varieties in that scale relative to the particular variety, and not as compared with other varieties of the same class; and, also, shall report upon the comparative value of the different wines in their respective classes. Adopted.

REPORT OF THE COMMITTEE ON RED WINES

The Committee on Red Wines respectfully report having examined the following varieties, viz:

One sample of Concord of the vintage of 1865, of sound body, and a fair agreeable table wine. This sample was made by Mr. Geo. Husman, of Herman.

Three samples of Concord of 1866, two of them not differing much in character from the sample of 1865. The sample receiving the highest vote was made by Mr. Michael Poeschel of Herman. The second best was by the same maker.

One sample of Hartford Prolific. This shows that a wine of creditable character may be made of this grape, inferior however to Concord. It is somewhat of a claret character, though not so highly colored.

One sample of Clinton, more of a Claret, ranking higher than Hartford Prolific, though falling below Concord.

One sample of Cynthiana, which fully sustains the high character of samples formerly exhibited of this variety, as a very superior and agreeable dark red wine. The foregoing three samples were made by Geo. Husman.

One sample of Ives' Seedling presented by Mr. Husman, from the Longworth Wine House, Cincinnati. This is a red wine, with a slightly purple tinge, very agreeable aroma, rather acid, having a taste as though made of imperfectly ripened grapes. We think this variety promises to take a position somewhat above Concord in character. Another sample of Ives' was before us, said to have been made in Cincinnati, quite equal to the above in body, but showed bad handling.

Two samples Norton's Virginia, 1865, both excellent samples of this important variety. That made by Michael Poeschel was considered best, the other made by Mr. Husman was considered of nearly the same quality.

Two samples of Norton's Virginia, 1866. That made by Mr. William Poeschel, exhibited by Mr. Husman, was considered perfect, certainly the best ever tasted by the committee. The other sample was by Michael Poeschel and was equal to any other sample except the last preceding. L. D. MORSE, Chairman Committee.

REPORT ON WHITE WINE.

The Committee appointed to examine and report upon White Wines, respectfully report the following on the table, upon which we have passed, judging their quality on a scale of ten.

Catawba,	1865,	G. Husman,	7½
Catawba, B,	1866,	M. Poeschel,	7½
Catawba, A,	1866,	" "	8
Catawba,	1866,	W. Poeschel,	7
Cassady,	1866,	G. Husman,	5½
North Carolina Seedling,	1866,	G. Husman,	5½
Taylor,	" 1866,	G. Husman,	6½
Taylor,	" 1866,	M. Poeschel,	7½
Herbemont,	1865,	M. Poeschel,	8½
Herbemont,	1865,	G. Husman,	6½
Herbemont,	1866,	G. Husman,	6
Cunningham,	1863,	G. Husman,	7½
Cunningham,	1866,	G. Husman,	7
Rulander,	1865,	M. Poeschel,	8½
Delaware,	1865,	G. Husman,	7½

ADOLPH ENGELMAN,
H. ROESCH,
J. M. JORDAN,
E. A. RIEHL, Chairman.

It was, on motion, Resolved, That the President be instructed to audit the bills for current expenses in order to their being paid by the Treasurer.

It was, on motion, Resolved, That the thanks of this Association are due, and are hereby tendered to the Hon. Commissioners of the County Court for their kindness in aiding the cause of progress in the Grape growing interest by accommodating us with a room for holding our meeting, and also, to the gentlemanly Janitor, Captain Jas. Quigley, for his kindness and attention during the session. Adjourned.

W. MUIR, Secretary.



EDITOR'S TABLE.

STRAWBERRIES.

The first strawberries of the season as far as we could ascertain were received by Messrs. Hoag & Bagby, fruit dealers, 307 Olive St., in this city, and came from South Pass, Ill. On the 17th of May, they received two quarts, and refused four dollars for one of them on their arrival. On the 20th they received another lot which brought \$2 per quart, and on the 21st they were selling at \$1.25.

Mr. Valentine Gerber, fruit dealer, 926 Broadway, received his first lot on the 19th from Anna, Ill., and got \$1.50 per quart.

Mr. Gerber and also Mr. Hoag, got their first consignments last year on the 9th of May.

On June the 1st they were ranging about 40 cents and on the 4th at 30 cents and have been falling since.

DR. WARDER'S WORK.

We have not had time to examine this work critically, but coming, as it does, from Dr. John A. Warder, we are ready to pronounce in its favor, and to recommend it to all Western Fruit Growers. We have been acquainted with Dr. Warder for the past fifteen years, and have rarely ever failed to meet him at any of the meetings of Western Fruit Growers. No matter how cold or how hot the weather, fruit displays and fruit talks, always draw him out. If he is not at one, it is because there is another meeting somewhere with perhaps more attractions at the same time. There is no man in the United States so well informed on Western Pomology—no man so well qualified to give a work to Western Fruit Growers. The study of fruit has been his profession, his delight. It has been to him a long-life labor, but it has been a labor of love. To no one would we go so quickly, so confidently for advice as to Dr. Warder on the subject of fruits—and now our fruit men have the labor of his life in this volume. It is published in neat style by Orange Judd & Co., of New York City, at \$3 per copy.

COMPLIMENTARY.

The following complimentary notice appeared in the *Kansas Gazette*, a few days since, a German paper published at Leavenworth City. We are under great obligations to our Editorial brethren generally, and we feel especially so to our worthy friend at Leavenworth. He has the good of the great cause of Agriculture at heart, and we extend to him a hearty greeting in printer's ink, and hope some day to welcome him face to face in our sanctum.

COLMAN'S RURAL WORLD.

"Kansas is a State adapted to the raising of stock, and according to its entire geographical position and the nature of its soil, more of an agricultural than either an industrial or com-

mercial country. The raising of stock, and agriculture, generally, with its many subdivisions, are, consequently, for our population, objects of universal interest; and our State will realize its high and noble mission in the natural development of the products of the soil. A political paper, though contrary to its own inclination, does but rarely take any notice of agricultural affairs, as we, for instance, would delight to do—for politics, occupying so much ground, may well be compared to a field, requiring thorough plowing and attention, the clearing out of weeds and a general care of all its useful elements, if the cultivation of it is to be fraught with blessing for the present as well as the future. The field too which affords it the truly daily bread, and the honorable class of our citizens who cultivate it in the sweat of their brow, may demand of right to be informed and instructed. By the side of a newspaper which fairly and faithfully guards the palladium of our Republic, and conveys intelligence to the farmer about things beyond his fence and his own mountains and rivers, where other people dwell—another paper should impart instruction how he may arrange, and keep arranged, his house, his stable, his pastures and his fields, in such a manner as to yield him the largest returns; a paper which would inform him of the latest inventions and their and other practical workings, and encourage him to reflect, and preserve him from a traditional shiftlessness, which, if any where, is certainly detrimental in America. Such a paper, which for many a year past has made its regular appearance upon our table, and which we never fail to peruse, is the *Rural World*, published by Norman J. Colman, N. E. corner of Fifth and Chesnut Streets, St. Louis, Mo. This periodical takes pains to bring everything which may prove of value to the farmer in his sphere of operations, and present it in clear, popular language, stripped of everything not essential. It is with pleasure we seize this opportunity to recommend our colleague the *Rural World*, as a journal, to all the readers of the *Kansas Gazette*, which (\$2 a year in advance) is abundantly worth its weight in gold.

We have not the honor, personally, to know its editor and proprietor; this recommendation is induced merely as in the interest of the agriculture of Kansas, and as a praiseworthy recognition of the conscientious and thorough editing of a department, which is as difficult as, at a superficial glance, it might first appear easy. The paper is published in our clime, and for our soil and our relations, which alone is sufficient to give it preference to those published at a greater distance. Whatever, whether in Europe, or in the East or West of America, is suited to us and our wants, will most certainly appear in the columns of the *Rural World*, and we would invite our friends of the country, who have not yet joined its number of readers, to give it a trial even upon these our assertions."

BOUND VOLUMES FOR 1866.

Bound Volumes of the *Rural World* for 1866 for sale at this office. Price, \$3.

ED. RURAL WORLD: The prospect for fruit is flattering. The frost of the 7th and 8th of May, did not injure our fruit. Peaches, pears, cherries and apples, promise an abundant crop. Grapes never were finer. It is too cool and wet for corn. There is great fears of grasshoppers. The eggs hatch by the million. So far they have not done much damage. J.M.
St. Joseph, Mo., June 1.

[Reported for Colman's Rural World.]

METEOROLOGICAL TABLE.

BY A. FENDLER, ESQ., ALLENTON, MO.

MAY, 1867.

Thermometer in open air.

7 A.M.	2 P.M.	9 P.M.	Mean of Month.
51.6	71.9	55.1	59.5
Maximum temp. 87.0, 3rd, 2 P. M.			
Minimum " 29.0, 7th and 8th, 5 A. M.			

Range, 58.0

Wet bulb Thermometer.

7 A.M.	2 P.M.	9 P.M.	Mean of Month.
49.2	58.0	51.1	52.8

Barometer—height reduced to freezing point.

7 A.M.	2 P.M.	9 P.M.	Mean of Month.
29.449	29.408	29.415	29.424

Maximum, 29.669, 2nd, 7 A.M.

Minimum, 29.093, 20th, 9 P.M.

Range, 0.571

Rain on the 4th, 11th, 12th, 16th, 19th, 20th, 22nd, 27th: together 7.86 inches, being more than double the average quantity. The rain on the 27th was unusually heavy, amounting to nearly 4 inches (3.94) in 22 hours.

The greatest rain month of 1866 was September, with 8.90 inches; of 1865 was July, with 9.26 inches; and March with 8.87; on the 29th and 30th of the last named month 4.58 inches of rain fell in 29 hours.

The maximum moisture of the atmosphere was on 27th, 9 P. M. and on the 28th, 7 A. M.

The minimum of moisture was on the 1st, 2 P. M. and 6th 2 P. M.

NEW ADVERTISEMENTS.

We call especial attention to the following new Advertisements in the present issue:—

W. H. Mann & Bro., will be prepared to supply all demand the coming season for Osage Orange plants, to those who failed to secure a supply this spring. They are men who understand the business.

L. Mills, offers pure stock for sale.

Two new works from the Publishing house of Orange Judd & Co., viz: "American Pomology—Apples, by Dr. Jno. A. Warder. Small Fruit Culturist, by Andrew S. Fuller.

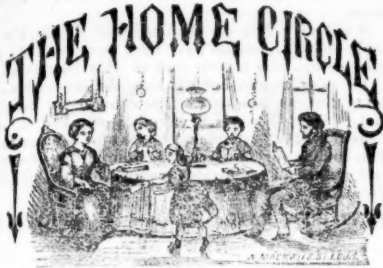
Crawford's Garden Cultivator, for sale by Blymyer, Norton & Co., Cincinnati, Ohio.

The Indelible Horticultural and Clothing Pencils, for sale by the Indelible Pencil Company, Northampton, Mass.

Cider Press Screws, Thompson & Carpenter, Poughkeepsie, N.Y.

Clagett & Sons, St. Louis, offer Crawford's Garden Cultivator for sale.

The following is said to be a certain cure for corns: Scrape a piece of common chalk; put a small portion of it upon the corn, and bind it with a linen rag. Repeat the application for a few days, and you will find the corn come off like a shell and perfectly cured.



STYLE.

There are some writers so slow and heavy, it seems they can never come to a point. And yet we read them—are even (which seems impossible) interested. It is because it is *their* style, their way of doing it, that we become enlisted; that it is the man—and that he has to express himself in *his* way, and not in the way of another. It is therefore an error to study the style of others with a view to use it—to write like Addison, for instance, or Milton, or Keats, or Carlyle. As well try to give the leopard another coat, a black, without the spots. The spots will show, or there is a false attempt which must only end in failure. There are many donkeys seen in lion's skins among our literary aspirants and others. They are constantly braying, and don't know it. Will not some friendly hand tear away the false covering, and show the donkey as nature made him—not for leonine purposes, but for what he was designed, which is usefulness, and which is of more value than is the lion. But if a lion—if unfortunate enough to be that useless and aggressive beast—let him show his mane and raise his voice—they were meant for that. But be what you are, to the world as well as to yourself—for you can never roar like a lion if you are only a Jack—it will be a bray—and shears will show instead of the mane.

Thus, a heavy, clumsy style, like a heavy foot, will do its work—will do it strongly, often like a Hercules. The tread of the elephant makes the smaller beasts quake.

The homeliest style has sometimes the greatest beauty by contrast—gems lurking in the depth of the mine. We are not to look to style; we are to look to what style conveys—for it is at best but a medium. The best style is that which is not noticed at all, the thought alone occupying the mind. So we should dress that the man, and not the clothes he wears, be noticed. The expression of the man should be the object of all.

TIME AND LABOR.—Time is money; so is labor: the two go together—they are twins. They do a wonderful sight of work in the world—they do *all* the work. They make the miser, the statesman, the poet—ay, the poet—the successful farmer, the successful mechanic, the successful thinker, the man of reputation, the man of influence, the Christian. With time alone, and not labor, we have the sluggard.—He stays where he is; he never stirs; he dies in his own track, and the world is the worse for him, as he is an incumbrance. None of the work has been done by him—he is a drone, a

wretched sloth, a toad to be trodden on, without the jewel: men execrate him.

SUN STROKE.

This is an instantaneous inflammation of the brain, occasioned by the sun's rays communicating their heat to the structures with such intensity and rapidity as to cause dizziness, headache, and nausea or vomiting; the patient then falls breathless, turns black in the face and dies, unless proper assistance is given on the spot: which is, to be taken to the shade. The neck should be instantly freed from all that binds it; pour warm water on the head and dash it upon the body—the Arabs pour it in the ears, this may also be done. It is sometimes an hour or two before relief is obtained, which is ascertained by the patient becoming more conscious and more able to help himself. Let him drink as much water as he desires, if he can swallow it.

Sun stroke is prevented by wearing a silk handkerchief in the crown of the hat, or green leaves, or a wet cloth of any kind; but during an attack, warm water should be instantly poured on the head, or rags dipped in the water and renewed every minute. The reason is two-fold: the scalp is dry and hot, and the warm water not only removes the dryness, but carries off the extra heat with great rapidity by evaporation. Sun stroke is more common in the temperate than in the torrid zones. It is more frequent and fatal in New York and Quebec than in New Orleans and Havana. Day laborers are most liable to sun stroke, especially in proportion as they use stimulating drinks. It is doubtful if any strictly temperate person ever becomes a victim to this instantaneous life-destroyer; but excessive exposure to the direct rays of a summer's sun, may occasion sun-stroke in any individual, in the proportion as he is of a sedentary occupation or of delicate health. Such persons, if compelled to be out of doors under a hot summer's sun, should wear a soft, loose hat, with some light, loose cloth in the crown; have the neck and throat bare and unconfined; should eat but little meat and live mostly on coarse bread and butter and berries, ripe, raw and perfect, without sugar or milk; keep regular hours and have abundant sleep. Laborers should wash the whole scalp in cold water several times a day, and keep the surface of the body clean by rubbing it with a damp towel every night before going to bed. Let the friction be sufficiently vigorous to cause an extra redness of the skin. It is being between two fires that makes sun stroke common in cities and uncommon on small islands or at sea, because the brick and stone pavements give back almost as great a heat as comes from the sun. —[*Hall's Journal of Health*.]

[The real cause of sun stroke is, in the want of equilibrium between the vital heat and the external temperature. The free and regular use of "cayenne" is invaluable as a preventive.—It is a well-known fact that, in many hot countries, such permanent stimulants as cayenne are held as essential to life—while volatile stimulants, such as alcoholic liquors, have a tendency to this sudden exhaustion, by inducing depression commensurate with the excitement. The use of ice water has a tendency to lower the temperature of the body and thereby induce a predisposition to what is popularly called sun-stroke.]—A.E.

A NEW WAY TO MAKE VINEGAR.—Good vinegar can be made by putting apple parings into a stone jug filled with water, and kept in moderately warm place. Add to the water a little molasses and yeast, and it will hasten it.

A STORM.

On the evening of the 3d of June, a tremendous storm passed over the central portion of St. Louis county, doing much damage. The morning was bright and warm, the barometer rising very rapidly in the early part of the day and falling suddenly by two o'clock. The clouds formed in the N.E., a very unusual circumstance here. About eight P.M., the cloud broke with great violence, accompanied with immense hail, doing great injury to glass, trees, vines, wheat fields, &c. Some of the hailstones were as large as hen's eggs, and they were, in some instances piled against fences a foot deep.

Its course extended from the Missouri river, through Manchester, reaching as far West as St. Paul's to the Meramec river, leaving the ground strewn with leaves, branches, and up-rooted trees. Fortunately, its course was limited to a narrow space. About 2 A.M. on the 4th, there was an awful rain, with thunder and lightning. The weather is now much warmer with prospects of fine weather.

DOMESTIC DEPARTMENT.

TO RENOVATE FEATHER BEDS AND MATTRESSES.—Make soiled and heavy feather beds clean and light thus: Dip a stiff brush in hot suds, and rub them; when clean, lay them on a shed, or in some clean place, and let it rain on them; when thoroughly soaked, let them dry a week in the hot sun, shaking them well, and turning them over daily, and covering them nightly with a thick cloth. It is quite as well as to empty the feathers and wash them and the tick separately, and much easier. Dry the bed thoroughly before sleeping on it. Hard and dirty hair mattresses can be made almost as good as new, by ripping them, washing the ticking, picking the hair free from bunches, and keeping it some days in a dry, airy place. Fill the ticking lightly, when dry, and tack it together.

TO CLEAN THE INSIDE OF JARS.—There is frequently some trouble in cleaning the inside of jars that have had sweatmeats, pickles, mince-meat, or other articles put up in them for keeping, and that when empty are wanted for further use. This can be done in a few minutes, without scraping or soaking, by filling up the jars with hot water, (it need not be scalding hot,) then stirring in a teaspoonful or more of pearlash. Whatever of the former contents has remained sticking about the sides and bottom of the jar will immediately be seen to disengage itself, and float loose through the water. Then empty the jar at once, and if any of the former odor remains about it, fill it again with warm water and pearlash, and let it stand undisturbed a few hours, or till next day; then empty it again, and rinse it with cold water. Wash phials in the same manner. Also the insides of kettles, or anything which you wish to purify or clear from grease expeditiously and completely. If you cannot conveniently obtain pearlash, the same purpose may be answered nearly as well, by filling the vessels with strong ley, poured off clear from the wood-ashes. For kegs, buckets, crocks, or other very large vessels, ley may be always used.

DOMESTIC ECONOMY.

No housekeeper or cook is fully prepared to enter successfully upon her culinary duties without having the *Best Chemical Saleratus* on hand. It relieves the mind of much of the care and anxiety experienced by a skillful cook. For sale by most merchants and grocers. Call for the genuine in red papers. It is better than Soda.

FOR SALE.—I offer for sale from Ten to Fifteen young "SOUTHDOWN" Bucks, lambed in April, to be delivered at the St. Louis Fair next fall. Price from Twenty to Twenty-five dollars. The lambs are from the celebrated Buck "Lexington," purchased of the Messrs. Warfields of Kentucky. I would also dispose of a few young Ewes of the same breed. Those wishing to purchase will please order soon.

June 1

"Glen Addie," Belleville, Ill.

St. Louis Wholesale Market.

Corrected for COLMAN'S RURAL WORLD, by
SHRYOCK & ROWLAND,

Successors to W. P. & L. R. Shryock,
COMMISSION MERCHANTS

COTTON & TOBACCO FACTORS,

And Agents for the sale of Manufactured Tobacco.
210 Levee and 216 Commercial St., St. Louis.
Particular attention paid to the purchase of Planta-
tion Supplies and General Merchandise.

May 22, 1867.

Cotton—18c to 23 ¢ lb.
Tobacco—Lugs, \$2.50 to 3.60 ¢ 100 lbs.
Shipping leaf, \$6.25 to 11.50.
Manufacturing leaf, \$8.00 to 40.00.
Hemp—Hackled tow, \$125 @ 135. ¢ ton.
Dressed, \$260 @ 280.
Medium, \$115 @ 160.
Lead—\$9.00 @ 9½ ¢ 100 lbs.
Hides—Dry salt, 18c @ 19.
Green 10c @ 11 ¢ lb.
Drv flint, 21c to 22 ¢ lb.
Hay—\$10.50 @ 16.00 ¢ ton.
Wheat—Spring, \$1.90 to 2.10, ¢ bush.
Winter, \$2.25 to 2.75 ¢ bus.
Corn—\$0.90 to 1.00 ¢ bush.
Oats—80c to 88 ¢ bus.
Barley—Spring, \$1.10 to 1.23.
Fall, \$1.50 @ 2.00.
Flour—Fine, \$4.00 to 5.00, ¢ bbl.
Superfine, \$5.00 to 9.50 ¢ bbl.
XX, \$10.00 to 11.00 ¢ bbl.
Ex. Family, \$14.00 to 16.00, ¢ bbl.
Butter—Cooking, 8c to 10; table, 15 to 20, ¢ lb.
Eggs—13½c, ¢ doz., shipper's count.
Beans—Navy, \$3.25 @ 4.00, ¢ bus.
Castor, \$2.00 ¢ bus.
Potatoes—\$1.00 to 1.15 ¢ bus.
Salt—per bbl. \$3.20. G. A., sack, 2.50 to 2.60.
Onions—\$6.50 per bbl.
Dried Fruit—Apples, \$1.75 to 2.25 ¢ bus.
Peaches, \$3.25 to \$4.50 ¢ bus.
Cranberries—\$12.00 per bbl.
Corn Brooms—\$1.50 to 3.50 per doz.
Groceries—Coffee, Rio, 24c to 26 ¢ lb.
Tea, \$1.25 to 2.00 ¢ lb.
Sugar, N. O., 13c to 14 ¢ lb.
Crushed & Refined, 16½c to 18 ¢ lb.
Molasses, N. O., 65c to 90 ¢ gal.
Choice Syrups, \$1.35 to 1.70, ¢ gal.
Soap—Palm, 6½c to 8 ¢ lb.
Ex. Family, 9½c ¢ lb.
Castile, 14c ¢ lb.
Candles—16c to 22 ¢ lb.
Lard Oil—\$1.10 @ 1.15 ¢ gal.
Coal Oil—50c ¢ gal.
Tallow—9½c ¢ lb.
Beeswax, 30c to 35 ¢ lb.
Green Apples—Choice Jenetons, (none) ¢ bbl

The Indelible Pencil Company
(NORTHAMPTON, MASS.)

Manufacturers of the Improved

PATENT INDELIBLE PENCIL

For MARKING CLOTHING, &c., have ready for sale
a new

Horticultural Pencil,

FOR INDELIBLE WRITING ON WOOD,

Invaluable for making DURABLE Tree and Gar-
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Prices—HORTICULTURAL, 75 cents, single; two for
\$1; \$5 per doz. CLOTHING PENCIL, 50 cents single;
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A LIBERAL DISCOUNT made to dealers.
EVERY PENCIL WARRANTED.

A New Book

For Fruit Lovers and Fruit Grow-
ers. Just Published

By **ORANGE JUDD & CO.,**

No. 41 Park Row, New York.

American Pomology.
APPLES.

By DOCT. JOHN A. WARDER,

PRESIDENT OHIO POMOLOGICAL SOCIETY; VICE-PRESI-
DENT AMERICAN POMOLOGICAL SOCIETY, ETC.

293 Illustrations.

To pomologists, a work by Dr. Warder will need
no commendation. Though a citizen of Ohio, he is
so sure to be at any Pomological gathering, be it
East or West, that the whole country claims him,
and if any one has a right to entitle his work AMER-
ICAN Pomology, it is certainly Dr. Warder. In this
work, the author has attempted the difficult task of
bringing apples into something like order.

This volume has about 750 pages, the first 375 of
which are devoted to the discussion of the general
subjects of propagation, nursery culture, selection
and planting, cultivation of orchards, care of fruit,
insects and the like: the remainder is occupied with
descriptions of apples. With the richness of material
at hand, the trouble was, to decide what to leave out.
It will be found that while the old and standard var-
ieties are not neglected, the new and promising sorts,
especially those of the South and West, have promi-
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onne, as the French would say, is the most extended
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CONTENTS: I. Introductory. II. History of the
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Planting. IX. Culture, etc. X. Philosophy of Prun-
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Fruits. XIII. and XIV. Insects. XV. Characters of
Fruits and their Value—Terms Used. XVI. Classifi-
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Regularity, Flavor, Color, Their Several Values, Etc.,
Description of Apples. XVII. Fruit Lists—Catalogue
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DWARF CHERRIES.

CURRENTS.

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CRANBERRIES.

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A new work, and the only one devoted to Small
Fruits. Special treatises of this kind have the ad-
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covers the whole ground of Propagation, Culture,
Varieties, Packing for Market, etc.

We predict that this work will bring Mr. Fuller
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While very full on all the Small Fruits, the Cur-
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orated than ever before, and in this important part
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The book is very finely and thoroughly illustrated,
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One **SUFFOLK** Boar, 1 year old, from N. J. Colman's
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Keeps fat on grass, and will now weigh 250 lbs.
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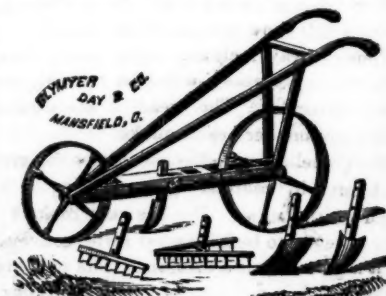
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Intending to make a business of breeding swine, I
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This is an entirely new Garden Implement. It has
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pelled by hand, and enables one man to do the work
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June 15-21

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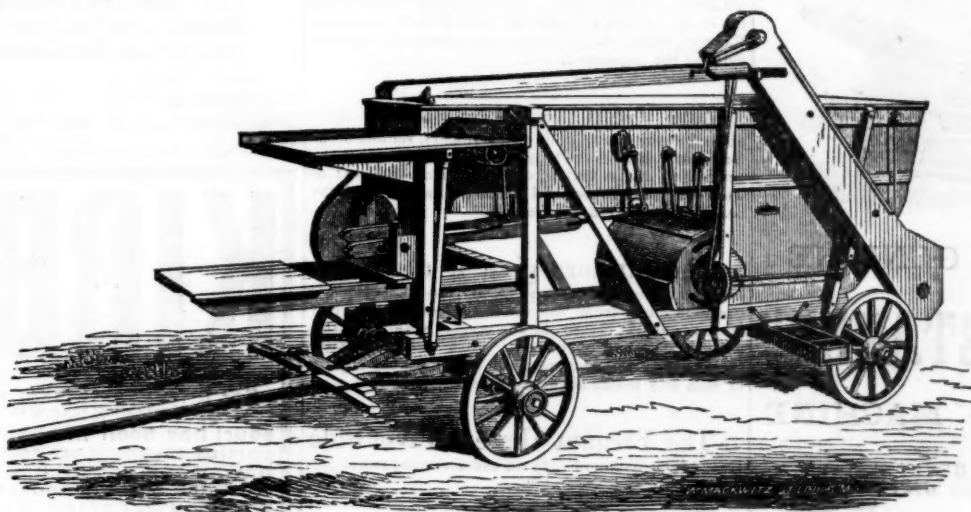
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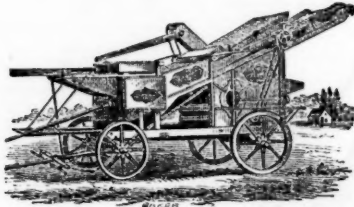
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C. AULTMAN & CO.'S
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THE ONLY GENUINE
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THRESHING MACHINE.

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Manufacturers,
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TWO STYLES OF HORSE
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The Improved "Carey"
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(Both eight and ten horse.)



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A laudable ambition exists among threshers to "own the best machine in the neighborhood." Nothing is more disagreeable to them than to have farmers complain that their work is not properly done, or to lose valuable time by reason of breakages, and they cannot be too careful in selecting a machine.

The Sweepstakes is the accredited head of the Threshing Machine family, and its superior strength, durability, simplicity, ease of draft, style of finish, and capacity for threshing and cleaning grain faster and better than any other in the world, are acknowledged.

The great reputation achieved by this favorite machine has led several unscrupulous manufacturers, and numerous agents, to attach the name "SWEEPSTAKES," in one way and another to their machines and advertisements to mislead and deceive.

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The Genuine Sweepstakes enables the thresher to pick his customers, seldom stops for repairs, lasts much longer than others, saves much grumbling and vexation, does the same amount of work with less labor, and enables him to select the best and most profitable jobs.

The farmers give it a preference, and often an extra price per bushel, because it threshes clean from the heads, separates perfectly from the straw, cleans fit for market without waste, saves all the grain, does its work with the utmost speed, safety and economy, and does not keep a gang of men and teams about them on expense.

The Elegant "Patent Pivot Side Gear" is to be found only on the SWEEPSTAKES.

Our "Patent Cleaning Apparatus" enables the operator to control the direction of the blast, and position of the sieves, and clean either heavy or light grain, without waste, as fast as it can be threshed—the chaff and dirt being separated from the grain BEFORE IT STRIKES THE SIEVE AT ALL.

Separators, Horse Powers, Straw Stackers, Gears or Jacks, sold separately, when desired. A written warranty delivered with every machine. The "SWEEPSTAKES" is usually a very scarce article after harvest, and parties should order EARLY.

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The Machines furnished through this General Agency will be of our own manufacture, at AUBURN, New York, and are much improved over any machine ever sold in the South-West. Farmers are EARNESTLY CAUTIONED against being led into the belief that the "KIRBY" is only a "rigid bar" machine, but allow us to assure you IT IS A "FLEXIBLE BAR" MACHINE, and also that it is the original and very best flexible bar principle in the world.

We fully warrant our Machine. It is a perfect Mower, perfect Reaper, perfect Hand-raker, and perfect Self-raker, — ALL COMBINED IN ONE! and the Cheapest in the World!

Send for Full Descriptive Pamphlet. Local Agents wanted. Address D. M. OSBORNE & Co., P. O. Box, 2583, St. Louis, Mo.

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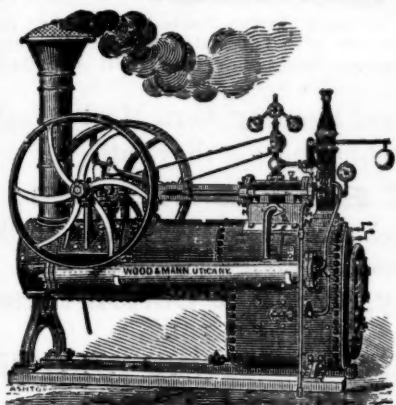
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CO.'S CELEBRATED
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**From 4 to 35 horse power.
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NO COOKING STOVES

Have ever been brought before the public which obtained so great a popularity or met with more favor than the

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Over 100,000 of these Celebrated Cooking Stoves,

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CHARTER OAK STOVE,

WITH EXTENSION TOP,

Has but one damper, and is so simple in its construction that a child can manage it. The ovens are larger, bake more uniform, and the Stove heavier than any Cooking Stove of corresponding size ever made. The Charter Oak is made expressly for Southern and Western people, and we are confident that they will find it the Best and Cheapest Cooking Stove they can buy.

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Knits Hosiery**

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Also, FANCY FABRICS of every variety. In fact every article of Knit Fabric in use in the family, can be manufactured on the Machine.

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Only 2 cents the pound of excellent soap if you save and use your waste grease. Only 6 or 7 cents the pound of the very best soap if you buy the grease. Directions attached to every package. All that is required is an iron kettle holding one or two gallons. For sale at every drug and grocery store.

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By Imp. Yorkshire out of Topaz by Imp. Glencoe, will make the season of 1867 at the farm of his owner, 12 miles west of St. Louis, and 3 east of Bridgeton, on the N. B. Plank Road, at \$25 the season.—Cash when services are rendered. Pasturage for a few mares from a distance at \$2 per week at risk of owner.
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The Subscribers have the largest Osage Orange Nursery ever grown in the world, covering nearly 300 acres closely planted, and which will yield from forty to fifty millions of plants, which they offer for sale in the

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Good No. 1 plants at retail, \$3.50 per M. At wholesale and to agents we offer special inducements. Agents coming well recommended wanted in every town and county. For further particulars address,
W. H. MANN & BRO.,
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**ST. LOUIS AGRICULTURAL WAREHOUSE
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(Established 1845, by Wm. M. Plant.)

Sign of the Gilt Plow.
116 & 118 South Main St.,

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Also, No. 820 NORTH FOURTH STREET
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Keep the Largest and Best Assortment of

PLOWS, HARROWS,

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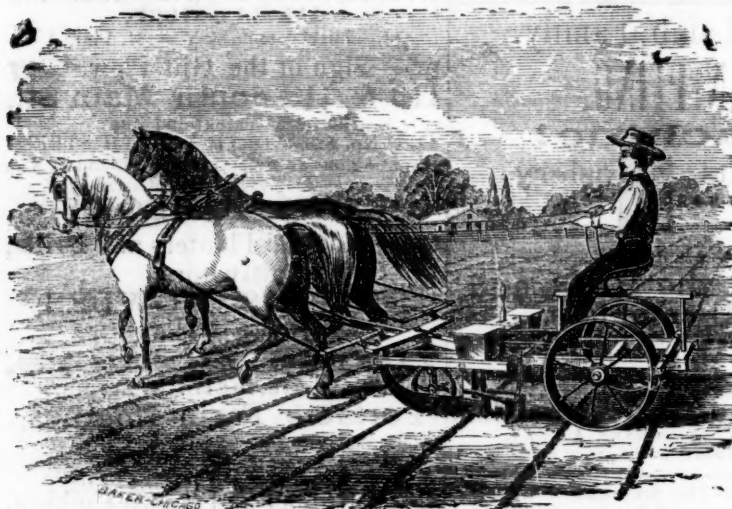
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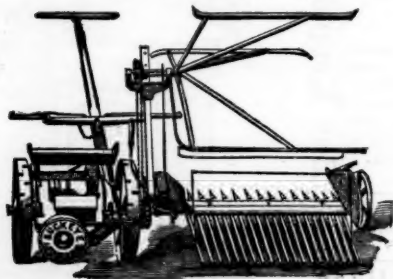
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